AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) A method for analyzing a power modeling simulation, comprising:

receiving a plurality of values of power data from a power modeling simulator;

generating summary information relating to single cycle behavior of the power data, comprising calculating absolute values of a peak and a lowest value of the power data, wherein the power data is associated with a specific cycle in the power modeling simulation; and

analyzing the power modeling simulation using the summary information.

2. (Original) The method of claim 1, wherein generating summary information comprises:

calculating a value of a single-cycle derivative, wherein the single-cycle derivative is a derivative of two particular power data in a set of successive cycles.

3. (Original) The method of claim 2, wherein the single-cycle derivative is a peak single-cycle derivative.

4. (Cancelled)

5. (Currently Amended) A method of analyzing power modeling simulation, comprising:

receiving a plurality of values of power data from a power modeling simulator;

generating summary information relating to multiple cycle behavior of the power data, comprising calculating an average value of the power data across a plurality of cycles, wherein the power data [[is]]associated with a current cycle is included with data from previous cycles multiple cycles in the power modeling simulation; and

analyzing the power modeling simulation using the summary information.

6. (Original) The method of claim 5, wherein generating summary information comprises:

calculating a multiple-cycle power average, wherein the multi-cycle power average is an average of power data over a plurality of cycles.

7. (Original) The method of claim 6, wherein a length of the plurality of cycles is fixed.

8. (Original) The method of claim 6, wherein generating summary information further comprises:

　　calculating a peak value of the multi-cycle power average.

9. (Cancelled)

10. (Original) A method of data analysis for a power modeling simulation, comprising:

　　receiving a plurality of values of power data from a power modeling simulator;

　　generating summary information relating to a multi-cycle derivative of the power data, wherein each power data is associated with at least one cycle in a simulation, and wherein the multi-cycle derivative is a derivative of at least two particular power data in non-successive cycles; and

　　analyzing the power modeling simulation using the summary information.

11. (Original) The method of claim 10, further comprising:

　　calculating a value of the multi-cycle derivative.

12. (Original) The method of claim 11, further comprising:

　　setting a threshold value as a reference value for determining the end of a current multi-cycle derivative;

　　calculating a single-cycle derivative; calculating a derivative of a start value and an end value of associated power data in the current multi-cycle derivative;

　　calculating a ratio of the value of the single-cycle derivative over the value of a derivative of the start value and the end values of associated power data derivative when the direction of the current multi-cycle derivative changes; and

　　generating the value and its cycle of the multi-cycle derivative when the ratio becomes larger than the threshold value, wherein the single-cycle derivative is a derivative of two particular power data in successive cycles.

13. (Original) The method of claim 11, further comprising:

setting a threshold value that is a reference value for determining the end of a current multi-cycle derivative;

calculating a difference from a highest value to a current value of the power data in the current multi-cycle derivative;

calculating a difference from the highest value to a start value of the power data in the current multi-cycle derivative;

calculating a ratio of the difference from the highest value to the current value of the power data over the difference from the highest value to the start value of the power data in the current multi-cycle derivative when the direction of the current multi-cycle derivative changes; and

generating the end-value and its end-cycle of the current multi-cycle derivative when the ratio becomes larger than the threshold value.